

CLAIMS

1. An electronic learning aid for teaching arithmetic skills which functions without an external source of electricity and weighs less than one kilogram, comprising:
a memory for storing questions for presentation to a user;
a question engine for selecting and communicating to the user a plurality of questions from the questions stored in memory;
an input device for enabling said user to answer each question communicated to said user by said question engine;
a scorer for generating an evaluative score for a set of questions communicated by said question engine, said score being determined by how well said user answered the questions constituting said set by means of said input device;
a score memory for storing a predetermined plurality of evaluative scores generated by said scorer and information relating to said scores; and
a display for displaying visually, in response to an input, each evaluative score stored in said score memory simultaneously with information relating to said score.
2. The electronic learning aid of claim 1 wherein said display displays said evaluative scores and related information one score at a time.
3. The electronic learning aid of claim 2, further including a switch for turning said learning aid to an off state and wherein said score memory is arranged to retain said evaluative scores and said related information even when said learning aid is in said off state.
4. The electronic learning aid of claim 1 wherein said score memory discontinues storing an evaluative score for a set of questions when necessary for storing therein an evaluative score for a more recent set of questions.

5. The electronic learning aid of claim 4 wherein said display displays said evaluative scores and related information one score at a time.

6. The electronic learning aid of claim 4, further including a switch for turning said learning aid to an off state and wherein said score memory is arranged to retain said evaluative scores and said related information even when said learning aid is in said off state.

7. The electronic learning aid of claim 5, further including a switch for turning said learning aid to an off state and wherein said score memory is arranged to retain said evaluative scores and said related information even when said learning aid is in said off state.

8. An electronic learning aid for teaching arithmetic skills which functions without an external source of electricity and weighs less than one kilogram, comprising:

a memory for storing questions for presentation to a user;

a question engine for selecting and communicating to the user a plurality of questions from the questions stored in memory;

an input device for enabling said user to answer each question communicated to said user by said question engine;

a scorer for generating an evaluative score for a set of questions communicated by said question engine, said score being determined by how well said user answered the questions constituting said set by means of said input device;

a score-communication device for communicating said evaluative score to said user; and

a missed-questions memory for storing a predetermined plurality of questions that, during any of a plurality of scored and/or unscored sets of questions, were answered incorrectly or were not answered within a per-question time limit;

the question engine, in conjunction with said missed-questions memory and in response to input, being arranged to develop and communicate to said user questions stored in said missed-questions memory.

9. The electronic learning aid of claim 8 wherein said missed-questions memory discontinues storing a question when necessary for storing therein a question more recently communicated by said question engine.

10. The electronic learning aid of claim 8 wherein, in response to input, said question engine can, from the same group of questions stored in said missed-questions memory, develop and communicate to said user a plurality of scored sets of questions.

11. The electronic learning aid of claim 10 wherein said missed-questions memory discontinues storing a question when necessary for storing therein a question more recently communicated by said question engine.

12. The electronic learning aid of claim 8 wherein said missed-questions memory continues to store questions even when said learning aid is in a main-power-off state.

13. The electronic learning aid of claim 9 wherein said missed-questions memory continues to store questions even when said learning aid is in a main-power-off state.

14. The electronic learning aid of claim 10 wherein said missed-questions memory continues to store questions even when said learning aid is in a main-power-off state.

15. The electronic learning aid of claim 11 wherein said missed-questions memory continues to store questions even when said learning aid is in a main-power-off state.

16. An electronic learning aid for teaching arithmetic skills, comprising:

a question engine for selecting and communicating to a user a plurality of questions, one question at a time; and

a question-probability selector operably associated with said question engine and arranged to allow a user to select one of a plurality of question-probability settings, such that when a setting is selected and said question engine is communicating questions, everything else being equal: (a) each question has a predetermined probability of being the next question communicated, (b) said predetermined probability is equal to or greater than zero percent and less than or equal to one hundred percent, (c) the probability of a question with a predetermined probability greater than zero percent can differ from the probability of a different question with a probability greater than zero percent; and (d) the probability of a question with a probability greater than zero percent can differ from a greater-than-zero-percent probability of the same question when a different one of said settings is selected.

17. The electronic learning aid of claim 16 wherein said learning aid functions without an external source of electricity and weighs less than one kilogram.

18. The electronic learning aid of claim 7, further comprising:

a missed-questions memory for storing a predetermined plurality of questions that, during any of a plurality of scored and/or unscored sets of questions, were answered incorrectly or were not answered within a per-question time limit;

said missed-questions memory being arranged to discontinue storing a question when necessary for storing therein a question more recently answered inappropriately by means of said input device; and

said question engine, in conjunction with said missed-questions memory and in response to input, being arranged, from the same group of questions stored in said missed-questions memory, to develop and communicate to said user a plurality of scored sets of questions.

19. The electronic learning aid of claim 7 wherein said question engine communicates questions to said user one question at a time, further comprising:

a question-probability selector operably associated with said question engine and arranged to allow a user to select one of a plurality of question-probability settings, such that when a setting is selected and said question engine is communicating questions, everything else being equal: (a) each question has a predetermined probability of being the next question communicated, (b) said predetermined probability is equal to or greater than zero percent and less than or equal to one hundred percent, (c) the probability of a question with a predetermined probability greater than zero percent can differ from the probability of a different question with a probability greater than zero percent; and (d) the probability of a question with a probability greater than zero percent can differ from a greater-than-zero-percent probability of the same question when a different one of said settings is selected.

20. The electronic learning aid of claim 15 wherein said question engine communicates questions to said user one question at a time, further comprising:

a question-probability selector operably associated with said question engine and arranged to allow a user to select one of a plurality of question-probability settings, such that when a setting is selected and said question engine is communicating questions, everything else being equal: (a) each question has a predetermined probability of being the next question communicated, (b) said predetermined probability is equal to or greater than zero percent and less than or equal to one hundred percent, (c) the probability of a question with a predetermined probability greater than zero percent can differ from the probability of a different question with a probability greater than zero percent; and (d) the probability of a question with a probability greater than zero percent can differ

from a greater-than-zero-percent probability of the same question when a different one of said settings is selected.

21. The electronic learning aid of claim 18 wherein said question engine communicates questions to said user one question at a time, further comprising:

a question-probability selector operably associated with said question engine and arranged to allow a user to select one of a plurality of question-probability settings, such that when a setting is selected and said question engine is communicating questions, everything else being equal: (a) each question has a predetermined probability of being the next question communicated, (b) said predetermined probability is equal to or greater than zero percent and less than or equal to one hundred percent, (c) the probability of a question with a predetermined probability greater than zero percent can differ from the probability of a different question with a probability greater than zero percent; and (d) the probability of a question with a probability greater than zero percent can differ from a greater-than-zero-percent probability of the same question when a different one of said settings is selected.

22. An electronic learning aid for teaching arithmetic skills, comprising:

a question engine for selecting and communicating to a user a plurality of questions, one question at a time; and

an input device for use by the user to respond to the questions, said question engine having at least one mode in which the time to respond to the questions has a per question limit, said question engine increasing the per question limit for those questions having a correct response that requires entry of more than one alphanumeric character by the user.

23. The electronic learning aid as set forth in claim 22 wherein the question engine has a longer per question limit for those questions having a correct response that

requires entry of at least three alphanumeric characters than the per question limit for those questions having a correct response that requires entry of two alphanumeric characters.

- 24.** An electronic learning aid for teaching arithmetic skills, comprising:
a question engine for selecting and communicating to a user a plurality of questions, one question at a time; and
a manually operable input device for use by the user to respond to the questions, said question engine having at least one mode in which the engine ceases accepting a response to a question upon the entry of an incorrect alphanumeric character, said question engine in response to the entry of an incorrect alphanumeric character displaying a subsequent question, and said question engine further waiting for a predetermined period of time after display of the subsequent question before accepting a response to said subsequent question.
- 25.** The electronic learning aid as set forth in claim 24 wherein the alphanumeric characters are numerals and the questions are arithmetic problems, the question engine being capable of accepting a sequence of numerals in response to a particular arithmetic problem, the question engine further being responsive to entry of an incorrect numeral in the sequence to display a subsequent arithmetic problem.
- 26.** The electronic learning aid as set forth in claim 25 wherein the question engine delays the predetermined period of time after display of said subsequent arithmetic problem before accepting the entry of any numerals subsequent to the incorrect numeral.